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ON A NEW SPECIES OF *ANTHODON* (*A. GREGORYI*)

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The type species of *Anthodon* (*A. serrarius*) was described by Owen in 1876 from a very imperfect skull which is in the collection of the British Museum. The specimen consists of the greater part of the anterior two-thirds of the left side of the skull badly weathered. A

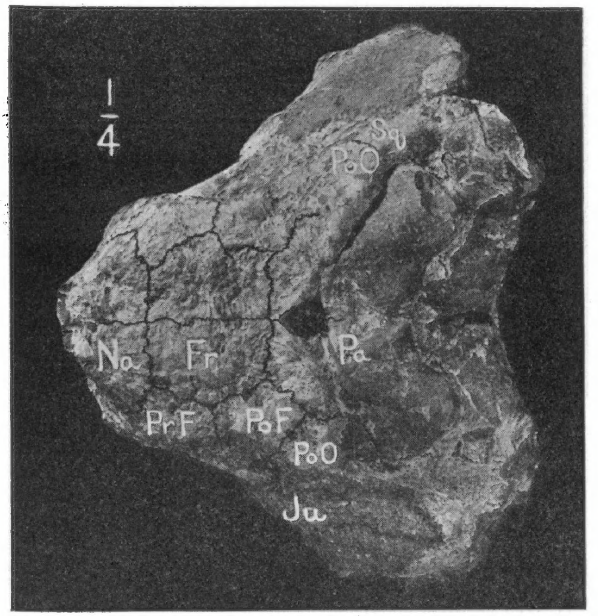

Fig. 1. *Anthodon gregoryi*, n. sp. Type. Skull. Amer. Mus. 7001. One-fourth natural size. Superior view.

number of upper molars are shown but none perfectly preserved. There are probably 11 teeth in the series and those preserved may have had as many as ten cusps, and unlike the teeth in the pareiasaurs of the lower Karroo beds, the crown has the cusps arranged in a very obtuse curve.

Over ten years ago W. C. Kitching discovered near Bethesda Road Station a good skull and much of the skeleton of an *Anthodon*, or allied

form [Amer. Mus. 7001]. The skull is typically pareiasaurian but with unusually large deep "cheeks." The back apparently has been completely covered by a bony carapace formed by large articulating bony scutes. The limbs so far as they have been displayed are relatively much shorter than in the typical pareiasaurs.

The skull is nearly perfect, but has lost the front of the snout, and the bones of the parietal and post-parietal region have been weathered off. In practically all the rest of the skull the sutures can be clearly made out.

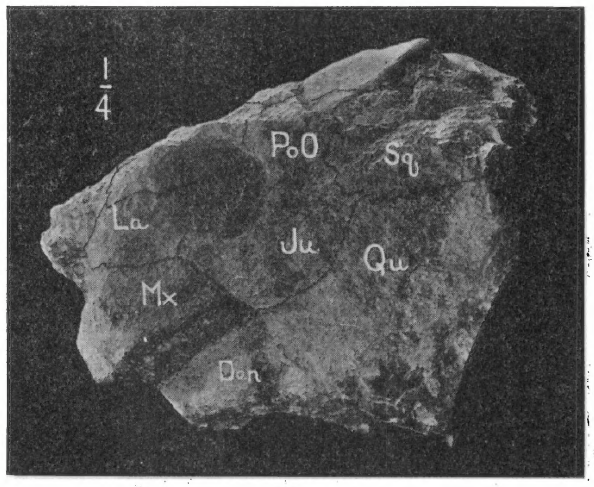

Fig. 2. *Anthodon gregoryi*, n. sp. Type. Skull. Amer. Mus. 7001. One-fourth natural size. Lateral view, left side.

The frontals are relatively small and removed from the orbital margins by the meeting of the prefrontals and postfrontals. The nasals are wide but short. The lachrymals reach from the orbits to the nostrils. The premaxilla is small and carries 3 incisors. The maxilla is relatively shorter than in typical pareiasaurs, and has apparently 8 molars.

The jugal is largely developed behind the orbit and forms a considerable part of the "cheek."

The prefrontal, the postfrontal, and the postorbital are arranged round the upper side of the orbit and are subequal in size. The parietals are much larger than the frontals, and the pineal foramen is very much larger than in typical pareiasaurs.

The exact limits of the interparietal and the tabulars cannot with

certainty be made out. But apparently there is only a simple interparietal and the tabulars are relatively small.

The squamosals are large and the quadratojugals very large.

The mandible differs from that of the typical pareiasaurs in having no horn-like development on the angular.

The following are the chief cranial measurements:

Greatest width of skull	295 mm.
Occiput to snout (about)	240 mm.
Interorbital measurement	123 mm.
Anteroposterior diameter of orbit	48 mm.
Occiput to back of pineal foramen	84 mm.
Pineal foramen	20 mm. × 20 mm.
Greatest length of mandible (about)	165 mm.
Eleven upper molars	116 mm.
The teeth apparently have 8 cusps.	

Possibly when *Anthodon serrarius* is better known it may be necessary to place the present specimen as a distinct genus. Certainly it is a distinct species, and I have much pleasure in naming it after Dr. W. K. Gregory, of the American Museum, who by his great work on *Moschops* has placed South African palæontology deeply in his debt.